WO 2005/044297 PCT/US2004/035804

IT IS CLAIMED:

1. A composition for use in preparation of a medicament for treating a condition in human subject responsive to interferon tau therapy, the condition selected from an autoimmune condition, cancer, or a viral infection, said composition comprising interferon-tau formulated for oral administration to the intestinal tract of the subject in an amount effective to produce an initial measurable increase in the subject's blood 2', 5'-oligoadenylate synthetase (OAS) level, relative to the blood OAS level in the subject in the absence of interferon-tau administration, wherein said interferon-tau is administered to the intestinal tract of the subject in such effective amount, on a regular basis of at least several times per week, for a period of at least one month, independent of changes in the subject's blood OAS level.

- 2. The composition of claim 1, wherein said interferon-tau is an ovine interferon-tau having a sequence identified as SEQ ID NO:2 or SEQ ID NO:3.
- 3. The composition of claim 1, wherein said interferon-tau is administered on a daily basis for a period of at least one month.
- 4. The composition of claim 1, for treatment of multiple sclerosis in the subject, wherein said interferon-tau is administered during a period corresponding to presence of the subject's symptoms.
- 5. The composition of claim 1, for treatment of hepatitis C infection in the subject, wherein said interferon-tau is administered for a period of several months past the time when no viral infection is detected in the subject.
- 6. The composition of claim 1, for treatment of cancer in the subject, wherein an anticancer agent is additionally administered to the subject during the period of interferon-tau administration.
- 7. The composition of claim 1, wherein the subject's blood OAS level is monitored during administration of interferon-tau to ascertain if the OAS level is increased.